

## **Life Cycle Assessment of Advanced Textile Wastewater Treatment**

Micropollutants that occur at trace quantities in aquatic environments originate from a variety of different point and diffuse sources. Effluents from industrial wastewater treatment plants, in which various micropollutants are not or not completely removed, are one of the major sources. In order to control micropollutant discharges from industrial wastewater treatment plants and avoid their potential negative ecological impacts, tertiary treatment techniques have to be applied to the effluents from conventional industrial wastewater treatment plants. The present study aims to compare the alternative tertiary treatment technologies that can be applied toward reduced micropollutant loads from textile effluents using the life cycle assessment approach. As advanced treatment techniques, ozonation and activated carbon adsorption are considered and compared in terms of their life cycle impacts.